GRINMAN

Isaak Grigor'yevich. Prinimali uchastiye: SAKBAYEV, Zh.M.; BLYAKH, G.I.; SHAGI-SULTAN, I.Z.; SIRAZUTDINOVA, Zh.A.; SHTEYN, N.S.; YERMAGAMHETOV, S.B.; KOZLOV, G.S.[deceased]; IVANOV, L.G.; OSHCHENSKIY, V.M.; DZHASYBEKOVA, E.K.; NURCALIYEVA, Kh. PRESNYAKOV, A.A., doktor tekhn. nauk, otv. red.; ALEKSANDRIYSKIY, V.V., red.

[Automation of nonferrous metal ore dressing processes] Avtomatizatsiia protsessov obogashcheniia rud tsvetnykh metallov. Alma-Ata, Izd-vo AN Kaz.SSR, 1964. 213 p.

(MIRA 17:10)

1. Laboratoriya elektroniki i avtomatiki Instituta yadernoy
fiziki AN Kaz.SSR (fo all except Grinman, Presnyakov,
Aleksandriyskiy).

ALEKSANDROV, A., kand. tekhn. nauk; GAKH, B., inzh.

System of traction sectors used in automotive transport. Avt. transp.

36 no.2:6-8 F '58. (MIRA 11:2)

(Transportation, Automotive)

ALEKSANDROV, A.

O nekotorykh voprosakh organizatsii raboty avtomobil'nogo transporta. On certain questions of organization of the automotive transportation. (Avtomobil', 1950, no. 3, p. 6-9, diagrs.) DLC: TL4.A87

SO: <u>Soviet Transportation</u> and <u>Communication</u>, <u>A Bibliography</u>, Library of Congress, Reference Department, Washington, 1952, Unclassified.

ALEKSANDROV, A., kandidat tekhnicheskikh nauk

Tasks in the development of automotive transport in the regions reclaiming new and idle lands. Avt.transp.33 no.8:7-9  $A_g$ '55.

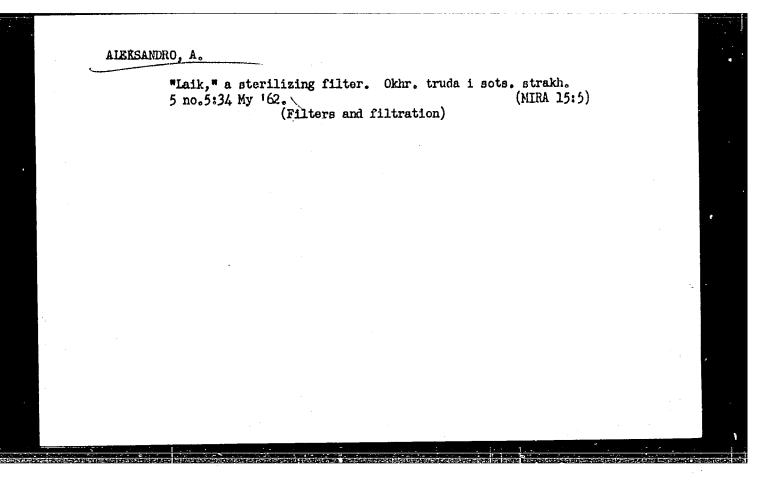
1. Kompleksnaya transportnaya ekspeditsiya Soveta po izucheniyu proizvoditel'nykh sil Akademii nauk SSSR (Kazakhstan--Transportation, Automotive)

Over-all study of operational and technical characteristics of roads and automobiles. Avt.transp. 35 no.7:5-9 J1 '57.

(:LRA 10:8)

1.Institut kompleksnykh transportnykh problem Akademii nauk SSSS.

(Transportation, Automotive)



USSR/Cultivated Plants. Technical Plants. Oil and H Sugar Bearing Plants.

Abs Jour: Ref Zhur-Biol., No 15, 1958, 68257

Author : Aleksandrov, A.

Inst

Title : Cotton Selection and Seed Cultivation in the Chinese People's Republic.

Orig Pub: Khlopkovodstvo, 1957, No 1, 56-61

Abstract: Formerly, the small-seedcase Asiatic cotton, Gossipium herbaceum L., was cultivated in China. Subserquently, it was replaced by G. arboreum L. varieties, which have a short and coarse fiber. In 1919, selection work with cotton was begun. In 1956, the relative proportion of sowings planted with selected

Card : 1/3

USSR/Cultivated Plants. Technical Plants. Oil and M Sugar Bearing Plants.

Abs Jour : Ref Zhur-Biol:, No 15, 1958, 68257

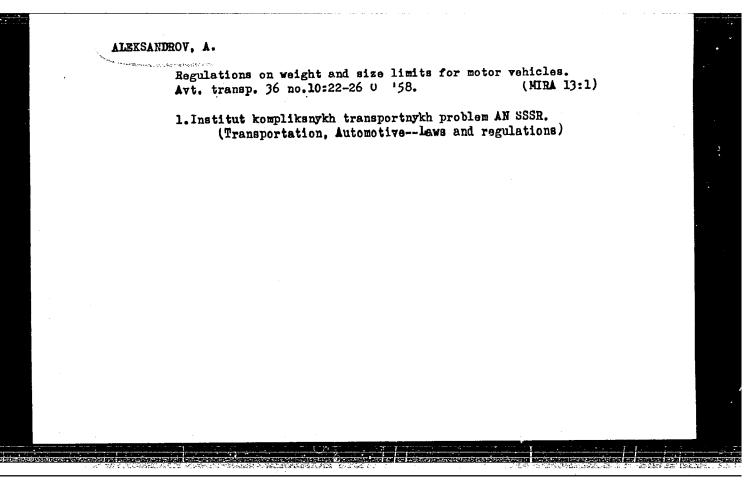
with thiamine, supplementary application of pollen of the maternal variety, etc.). Variety testing has been organized. In 1956, 22 Soviet varieties were tested. -- N. N. Konstantinov

Card : 3/3

ALEKSANDROV, A.; FENEV, T.

For cheap granaries on cooperative farms. p. 30. (Kooperatvino Zemedelie, Vol. (12) no. 5, May 1957. Sofiia, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no 10, October 1957. Uncl.



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ALEKSANDROV, A.

27-12-6/27

AUTHOR:

Aleksandrov, A., Methodologist of the Sverdlovsk Oblast' Methodi-

TITLE:

The Introduction of Advanced Experience (Vnedreniye peredovogo

opyta)

PERIODICAL: Professional'no - Tekhnicheskoye. Cbrazovaniye, 1957, # 12,

p 6-8 (USSR)

ABSTRACT:

The author points out that the Methodical Section at Sverdlovsk during a number of years has paid much attention to the dissemination of advanced experience in training and educational work. The author deals in detail with the various stages of dissemination and then describes a number of cases initiated by the instructors or foremen and regarded as a foremost method of instruction. One of the first mentioned is that of instructor Mal'tsev of the Trade School # 5 at Serov who organized practical house lessons in electrical engineering with the use of devices, models and other visual aids made by the students. Another example is that of instructor Raytsin of the Trade School # 9 at Chelyabinsk, who constructed a stand for solving problems and practical lessons in electrical engineering. A

Card 1/2

The Introduction of Advanced Experience

27-12-6/27

sketch of the stand was forwarded to all the trade and technical schools of the Oblast'. The independent manufacture of various objects by the students, as practiced by many schools of the Oblast', is of great instructional and educational importance. The author recommends that attention be given to the experiment of foreman Korochkin of Trade School # 47 at Seversk, who with his apprentice group took over the attendance at an open hearth furnace at the metallurgical plant, the school's basic enterprise. The workers of the Methodical Section are convinced that not all the possibilities have been used in this field, and that new ways to expand the work should be sought.

ASSOCIATION: The Oblast' Methodical Section, Sverdlovsk (Sverdlovskiy

oblastnoy metodicheskiy kabinet)

AVAILABLE: Library of Congress

Card 2/2

# Aleksandrov, A. (Leningrad) Problems in profitable production and the distribution of profit of industrial enterprises. Vop.ekon. no.9:156-158 S'61. (Profit)

ALEKSANDRÓV, A. (Col.)

Subject : USSR/Aeronautics

Card : 1/1

Authors : Aleksandrov, A., Col., and Stepanov, A., Col.

Title : The Air Force of the Fatherland

Periodical: Vest. vozd. flota, 2, 65 - 75, February 1954

Abstract: This is a short historical review of the development of the Russian Fighter Air Force. Several statistical

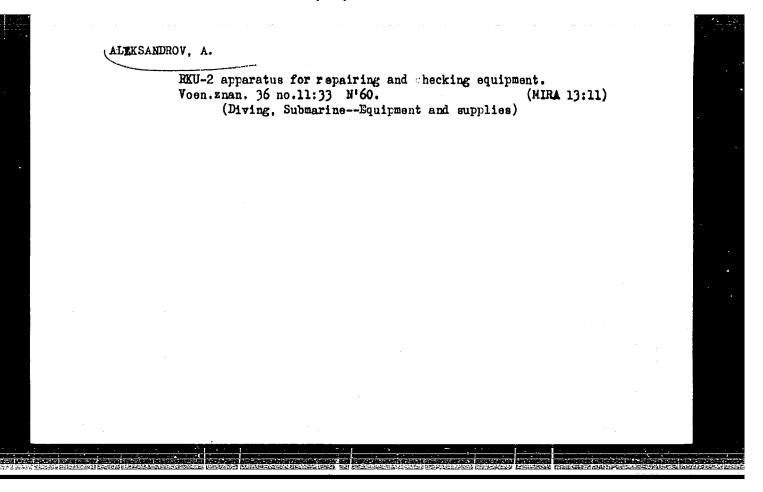
tables and graphs of a general character appear in the

AID - P-32

text.

Institution: None

Submitted : No date



### "APPROVED FOR RELEASE: 06/05/2000

### CIA-RDP86-00513R000100820004-6

ALEKSANDROV, A.

107-57-5-5/63

AUTHOR: Aleksandrov, A., Chief of a laboratory
TITLE: New Great Tasks (Novyye bol'shiye zadachi)

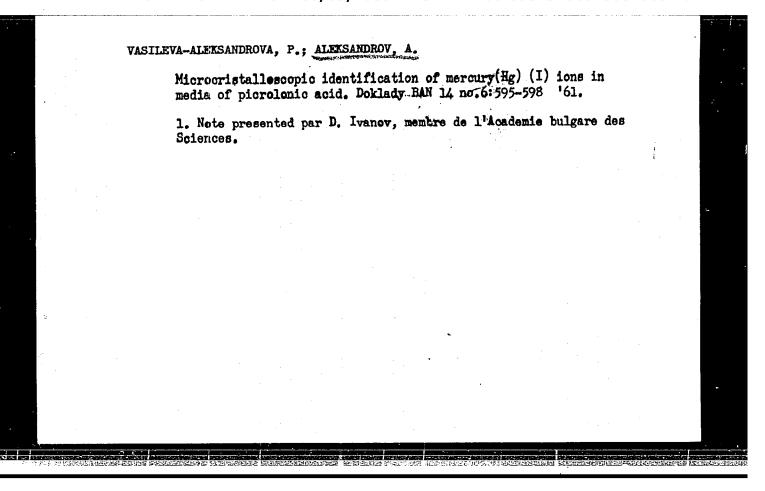
PERIODICAL: Radio, 1957, Nr 5, p 7 (USSR)

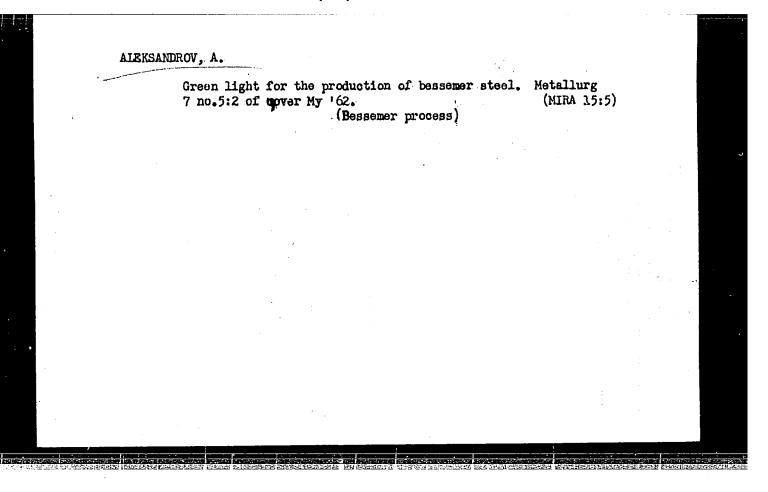
ABSTRACT: The fundamental reorganization of management of industry and construction as mapped out by N.S. Khrushchev is a necessary step welcomed by all industry workers. The Ministry of Radio-Engineering Industry can serve as an example. Its two Main Administrations have had control over the electro-vacuum industry which has often resulted in confusion. Mutual ties between research institutes and factories have been poorly organized; newly developed models have gone into production very slowly. Supply of industrial enterprises with measuring instruments and equipment has been inadequate. "Up to this time our laboratory has no experimental glass shop which seriously deters new developments".

ASSOCIATION: The Ministry of Radio-Engineering Industry

AVAILABLE: Library of Congress

Card 1/1

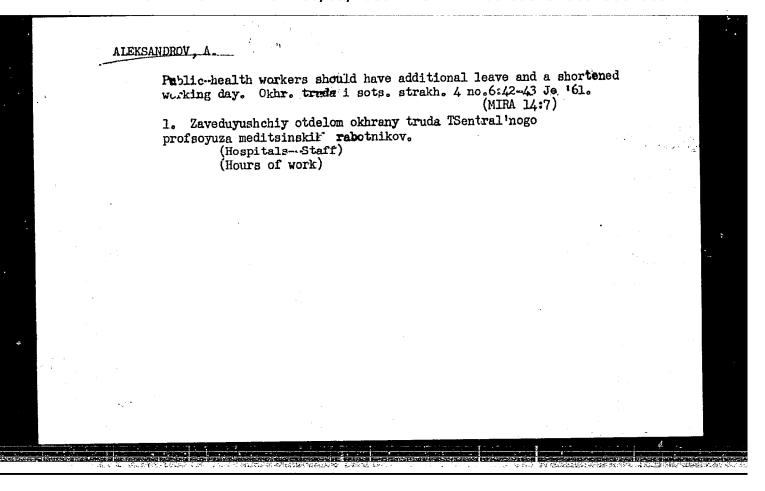




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S RULLWAND DAYS & SALES	n mode activities of material activities and activities activities and activities activities and activities activities and activities ac	of Articles Rescor, Toyenisdat, 1959. 232 p. (Series: Meuchno-populyarraym. bibliotem.) Number of copies printed not given.	Mar In. M. Badary Tach. Mar A.M. Carrillows Ed. and Compilers L. D. Brefferer, Chylmin.	This book is intended for the general reader.	TRACE: The papers in this collection discuss in popular style, and on the basis of data published in the Seviet and one-briefs by seve, problems of the seviet and one-briefs by seve, problems of the one severe severes to contact one relations at sev. The only-briton was not severe as	megring factors of a nuclear of mass destruction. A nu	defense of ships and of shower plants in naval wessels	ing with the intuine prospectional the vorld's fire	t to play an important party as collection also contains 1955 - 1956, in revised and	der. Penetrating Sadiation	Aleksandrov, A., Ruginer Lieutenant Colonel, and G. Korier, Engineer	moder. Madiosotive Contembation	brosisov, L. Optain, and V. Vladisliov, Incinear Captain. Eftens of a filly	Mirgiranis, G., Professor, Doctor of Sadmical Sciences, Engineer Captain. Brease of Ships Against Explosions	Means of Antipucleur Protection of Bilps of	Dobblor, P., Cardidate of Trichaical Sciences, Engines: Commuder.	il. Antipuciest Defense of Objects Asbore	moder. Madiation Decommiss.	<u>leksyrv, K., Ingluser Coloust.</u> Decorasisation on a Mip Polymor, K., Ingluser Captain. Protesting mays squass Horalisation	helor, A., Doent, Candidate of Trainited Sciences, Engineer Meutenart Colonel. Trails Rogerous in Testing of Suclear Fespons	Hobblor, P., Candidate of Mechalcal Sciences, Engloser-Co- Microalimities: on Salps	Figitains, Mr., Lieutenant Colonel of Medical Serrice. ensites on a Mily	numma, 4., Doess, Candidate of Ristorical Sciences, Ospinia. Atomic Wespons and grown Problems of Narm, Incides (According to Data Fron the Fronting Frees)	Unior_A, Doest, Castidate of Technical Sciences, Engines: Sub- Freezander. Assiron Submarines With Monie Engines (According to Date From the Foreign Press	Hibaylov, E., Cadidate of Behnical Sciences, Sugheer Lieutenant Coloral. Atomic Bapta Bosh (According to Inte From the Persign Press) 194	Ber Admirel. Atomic Power	Solutest, M., Doessi, Candidate of Technical Sciences, Inglose: Captain. Use of Atomic Engines in Unips	Fronton, I.a., Corresponding Newber of the Academy of Edisons of the 1858, Encored torbar in the Tesla of Science and Technology of the 1888, Ather-Powerd Ships	Warmarov, H., Omards Colonel. Atomic Saplane of the Puture (Ac- confills for Take From the Foreign Frees) Co-registing, D., Engineer Captain. The World's First Avonto tween Co-registing.	Library of Congress (U7757.039)	
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# AIEKSANDROV, A. Protection from radiation. Okhr. truda i sots. strakh. 5 no.7:34-35 JI '62. (MIRA 15:7) 1. Zaveduyushchiy otdelom okhrany truda Tsentral'nogo komiteta profsoyuza meditsinskikh rabotnikov. (RADIOLOGY, MEDICAL—HYGIENIC ASPECTS)

## Apparatus for artificial respiration. Okhr. truda i scts. strakh. 5 no.6:34-35 Je \*62. (MIRA 15:7) (Respiration, Artificial—Equipment and supplies)



ALEKSANDROV, A., kapitan-nastavnik

Some navigational characteristics of the Kazan'-Stavropol' section of the Kuybyshev Reservoir. Rech. transp. 19 no.3:51-53 Mr '60.

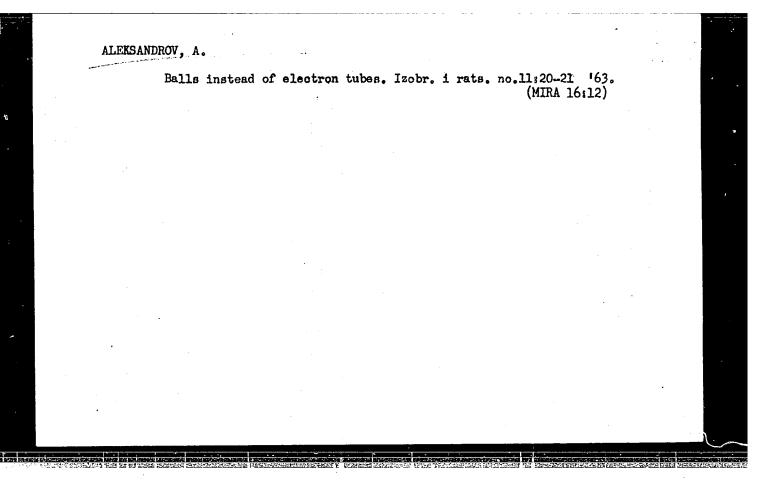
(Kubyshev Reservoir---Navigation)

(Kubyshev Reservoir----Navigation)

## ALEKSANDROV, A,; VASILEVA-ALEKSANDROVA, P.

Photometric determination of bivalent tin with picrolonic acid. Zhur.anal.khim. 18 no.7:905-906 Jl '63. (MIRA 16:11)

1. Institute of Food and Playouring Industry, Plovdiv, Bulgaria.



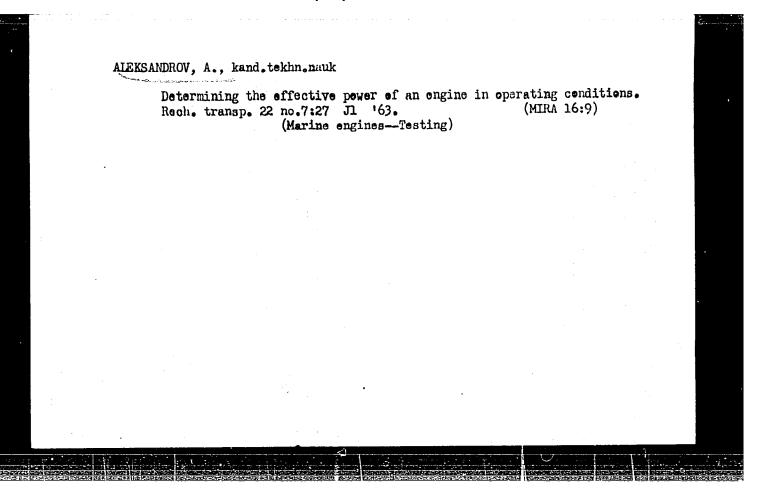
ALEKSANDROV, A., prof.; ZHEVTYAK, P., dotsent; RABINOVICH, G., dotsent; YASTREBOV, N., dotsent; LAYKOV, A., prepodavatel'

Strengthen the financial service in enterprises: Efficiency is the important demand. Fin. SSSR 38 no.1:59-62 Ja '64. (MIRA 17:2)

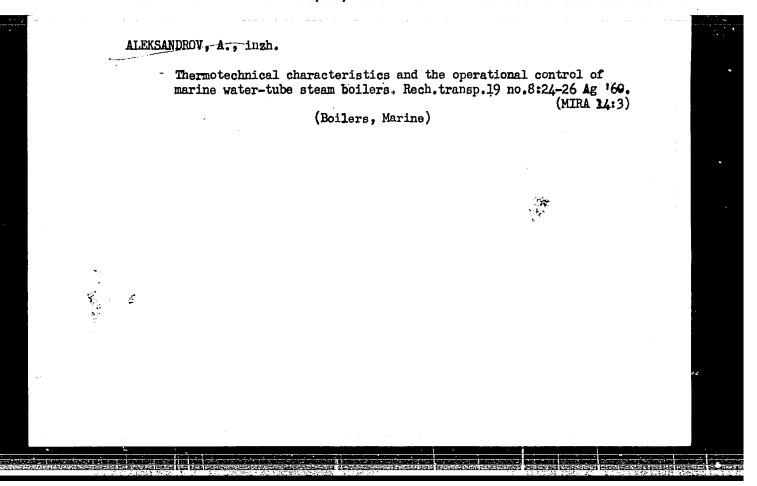
### ALEKSANDROV, A.

Advanced experience of the builders of the Volga Hydroelectric Power Station (22d Congress of the CPSU). Na stroi, Ros. no.12: 2-5 D '61. (MIRA 16:1)

1. Nachal'nik Volgogradgidrostroya. (Volga Hydroelectric Power Station (22d Congress of the CFSU))



ALEKSANDROV, A. (Simferopol') The irreconcilable are on watch. Grazhd. av. 21 no.5:24-25 My 164. (MIRA 18:4)



PHASE I BOOK EXPLOITATION SOV/6261

Kernonergie und Flotte; Artikolsammlung (Nuclear Energy and the Navy; Colloction of Articles) [Berlin] Doutscher Militarverlag [1961]. 22 p. Errata slip inserted. 2000 copies printed.

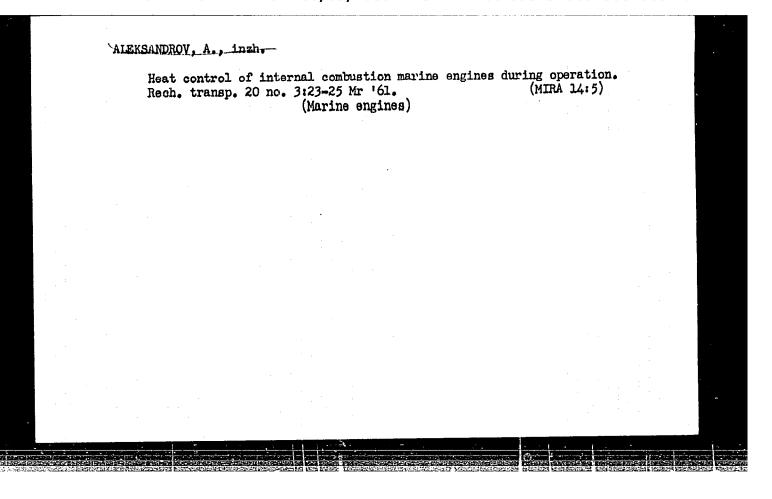
Translation from the Russian of: Atomnaya energiya i flot.

Translator: Erika Stouk, Lieutenant Commander, Responsibility for German edition: Claus Gruszke, Engineer; Ed.: Klaus Krussieg.

PURPOSE: This colloction of articles is intended for officers of the army, coast guard, and merchant marine.

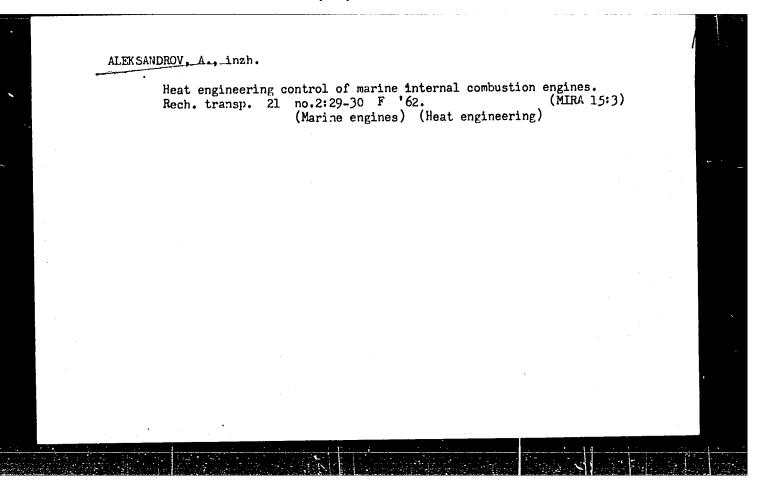
COVERAGE: The book, a translation from the Russian, contains 25 articles dealing with the application of nuclear weapons to navalticles dealing with the application of nuclear weapons to naval additional data for this edition. The devastating features of nuclear explosions are discussed. Attention is also given to the clear explosions are discussed. Attention is also given to the protection of personnel, ships, and coastal facilities against nupprotection of personnel, ships, and coastal facilities against nupprotection of personnels, ships, and coastal facilities against nupprotections.

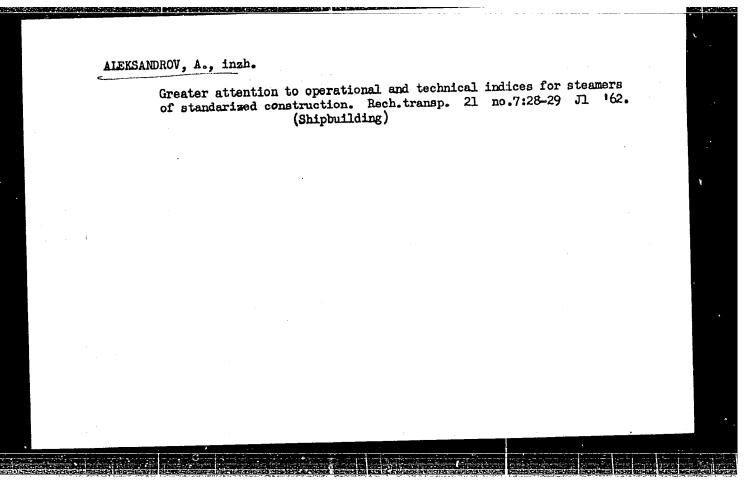
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	6. A. Aleksandrov, Engineer Lieutenant Colonel, and O. P. Major Engineer. The "Foot Wave" and Its Damaging Effe	act oo		
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	7. I. Frolov. Ionizing Contamination	2002		*
	8. P. Abrosimov, Captain (Navy), and V. Vladimirov, Engi- Captain (Navy). Protecting a Ship Against Nuclear Wea	pons 78		
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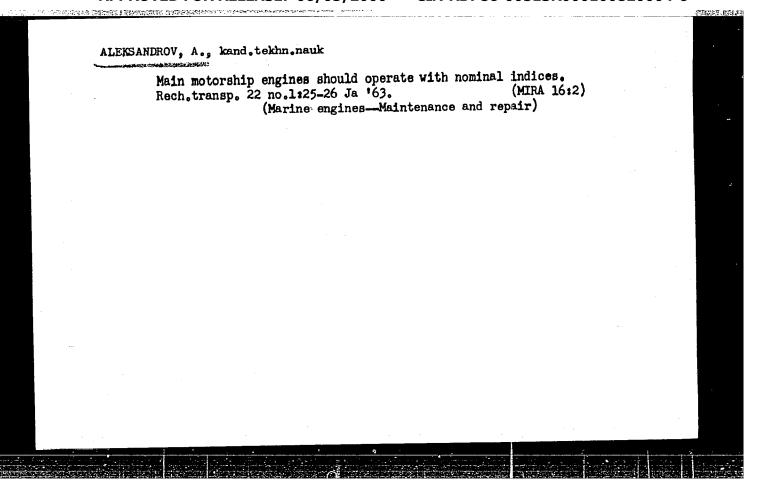


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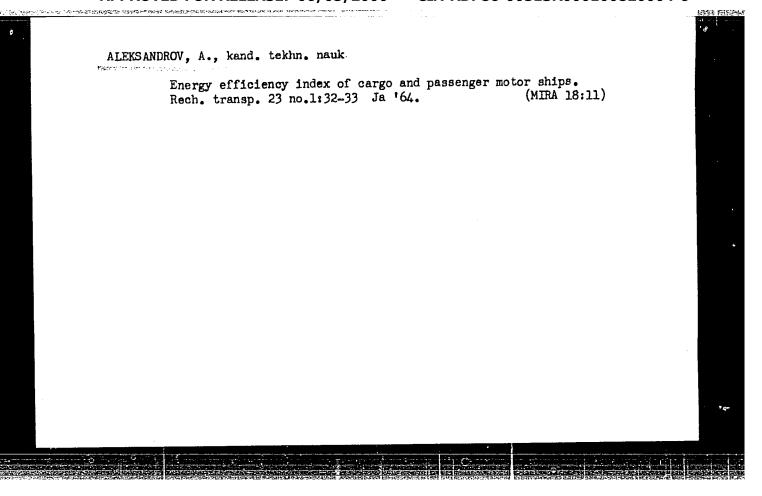


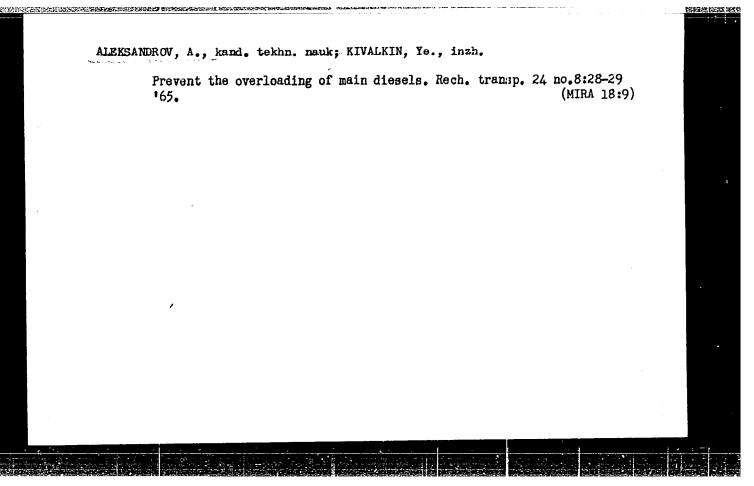


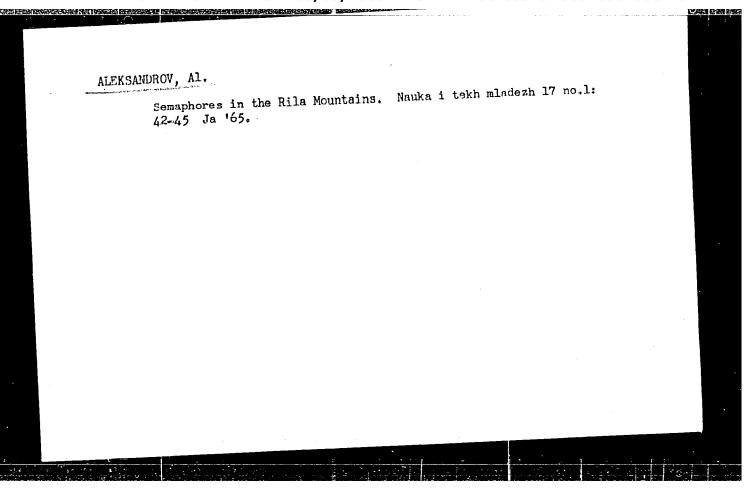
ALEKSANDROV, A.; VASILEVA-ALEKSANDROVA, P.

Detection of tin in the systematic analysis of cations of the hydrogen sulfide group. Zhur.anal.khim. 18 no.10:1275-1276 0 '63. (MIRA 16:12)

1. Institute of Food and Flavouring Industry, Plovdiv, Bulgaria.







Utilizing heat from bleeder steam superheating in a regenerative preheating system for feed water. Nauch.dokl.vys.shkoly; energ. no.4:141-151 \*58.

1. Rekomendovana kafedroy teplovykh elektrostantsiy Noskovskogo energeticheskogo instituta.

(Feed-water heaters)

ALEKSANDROV, A. A.

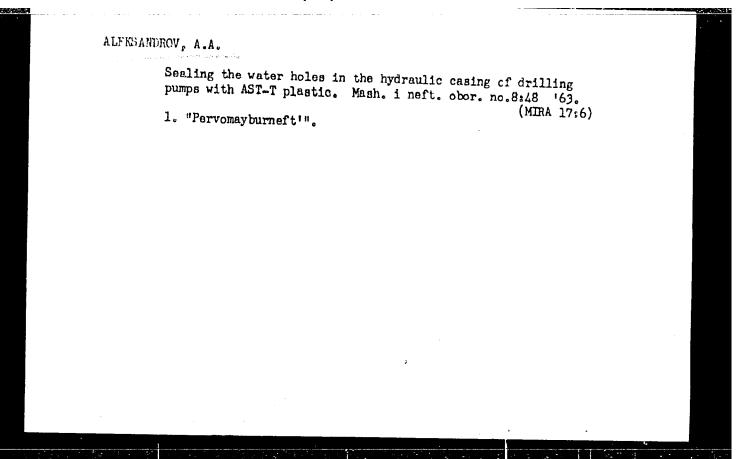
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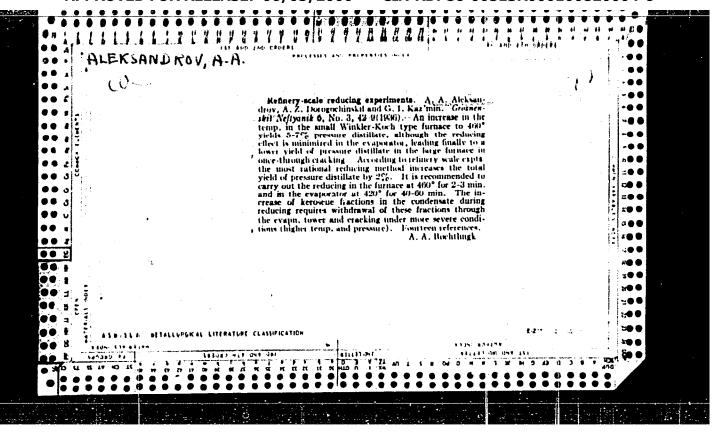
USSR/Engineering - Construction, Pipe Lines 15 Sep 52

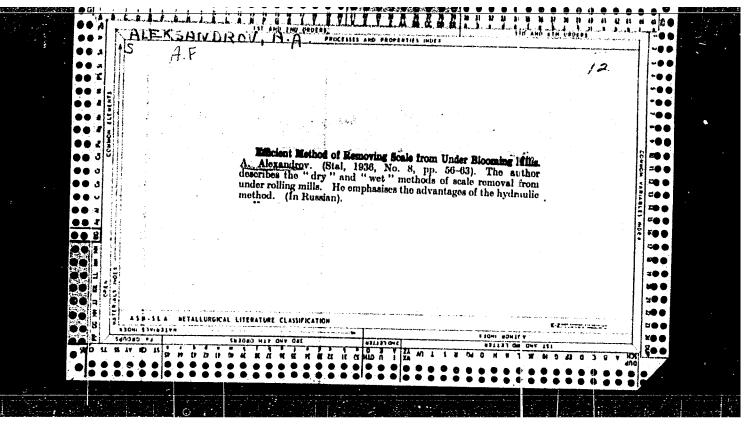
"Mechanical Device for Pipe Rotation," A.A. Aleksnadrov, Engr, Tsentrospetsstroy Trust, MNP (Ministry of Petroleum Industry)

"Byul Stroit Tekh" No 17, pp 26-28

Describes mechanism constructed at drilling machine plant of Tsentrospetsstroy for rotating pipes during welding of long pipe lines. Device is light, and small, driven by ac motor and permits quick charge of pipe rotation speed, representing improved model in comparison with existing devices. First lot of new rotating devices has been sent from plant to construction projects.







ALEKSANDROV, A. A.

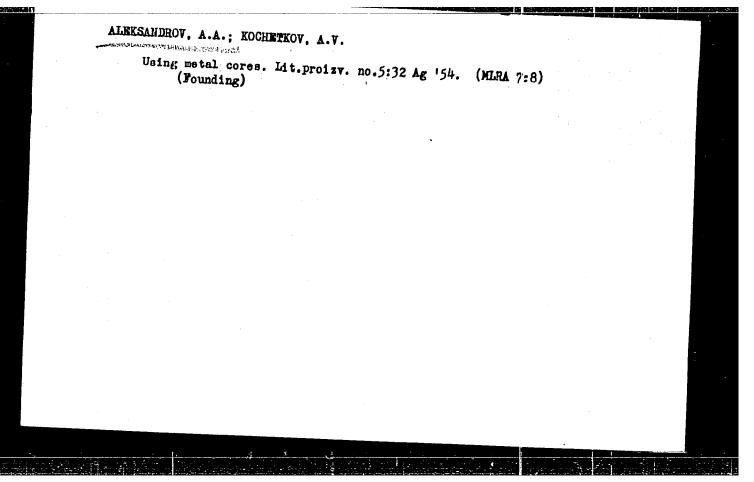
Elumingi i slabingi: pod red. A.I. TSelikova. Mockva, Metallurgizdat, 1949. 247 p. illus.

Bibliography: p. 2h5-2h7.

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Blooming Mills and slabbing mills.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.



Aleksandrev, A.A

137-1957-12-23666

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 118 (USSR) AUTHOR:

TITLE:

Multi-Stand Blooming Mills (Mnogoklet'yevyye blyumingi)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, Vol 1, pp 44 - 57

ABSTRACT: The productivity of shape- and sheet-rolling mills (M) considerably exceeds the capabilities of duo-reversible blooming mills (B). Therefore, there are now plants which introduce double B's arranged either in series or in parallel to one another. On existing B's additional stands (S) are being installed, for example, at the MMK plant. Common to duo-reversible B's is the rolling (R) with small reduction, R with unrestricted widening, R with alternating forward movement of the head and rear end of the billet, and R with great inaccuracy of cross section. All of this greatly influences the quality of the blooms and slabs as well as the consumption of metal. The multi-stand B's, which as a rule have as many stands as there are passes, permit large drawings in the rhombus-square : design system, which, on the average,

Card 1/3

137-1957-12-23666

Multi-Stand Blooming Mills

The R is carried out with restricted widening. Different versions of multi-stand B's are proposed for the R of billets weighing 5, 7.5 to 9 and 10.5 tons. In the R of 7.5-ton billets the mill consists of 8 S's arranged in series. The first two S's have rolls; rotating in a single sense, deeply cut-in rectangular calibers, and a nominal roll diameter of 1350 mm. After that, the R may be carried out either by the rhombus-square system, or in rectangular grooves, or in stands consisting of two horizontal prolls with shallow-cut grooves and two vertical rolls. the rolling process may be carried out almost without widening, and a large number of intermediate sections may be obtained for use in the final production stand, The velocities of R in the last S, which turns out  $250 \times 250$  mm blooms, are coordinated with the velocities of the continuousbillet mills installed following this B, and thus ensure a positive grip of the metal by the rolls. The velocity used in the last stand (1 m/sec) is more than twice as great as the rolling velocity on existing continuous-billet mills, thus making it possible for one multi-stand mill to supply two continuous-billet mills. The output of such a B is appx. 6.5 million tons per year.

Card 2/3

137-1957-12-23666

Multi-Stand Blooming Mills

The construction of such an S is considerably simpler than that of duo-reversible B's: there is no need for complex pressure mechanisms, broad conveyors, heavy working rolls, cumbersome S's, spindles, etc.; the electrical part is also considerably simplified by the installation of synchronous motors without costly Il'gner aggregates, etc. The R speed on this stand is such that the blanks should be fed in every 20 - 30 sec.

B. Ye.

1. Blooming mills-Operation 2. Rolling mills-Modernization 3. Rolling mills-Characteristics

Card 3/3

Alexbandrov, A.A.

137-1957-12-23641

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 114 (USSR)

AUTHOR: Aleksandrov, A. A.

TITLE: The Rate of Rolling Speeds in Duo-reversible Blooming Mills (Rezhim skorostey prokatki na duo-reversivnykh blyumingakh)

PERIODICAL: Tr. nauchno-tekhn. o-va chernoy metallurgii. Ukr. resp. pravl., 1956, 1, pp 73-85

ABSTRACT: Investigations of the rates of spreds in duc-reversible blooming mills (B) were performed by oscillographic methods by the Khar'kov Engineering-Economic Institute together with the TsNIIT Mash and the Makeyevskiy and the "Azovstal" plants. For the Makeyevskiy B 1150 a number of graphs were plotted showing the speed variation during rolling of 160 x 200 mm, 200 x 200 mm and 240 x 240 mm blooms of bubbling steel, 240 x 240 mm of bubble-free steel and 130 x 300 mm slabs of bubble-free steel SKhL-1. From the "Azovstal" plant's B1170 oscillograms were taken on the basic 250 x 300 mm rail-blooms, 205 x 220 mm, 205 x 245 mm, and 280 x 300 mm blooms of bubbling steel.

Card 1/2 bubbling steel, as well as on various compositions of bubble-free steel of  $190 \times 200$  mm,  $270 \times 280$  mm and  $330 \times 335$  mm.

137-1957-12-23641

The Rate of Rolling Speeds in Duo-reversible (cont.)

For a fuller analysis of the rates of speed employed at both of these B's, the operation of the leading B's of the Magnitogorsk and the Kuznetskiy combines were studied. The rotational speed (S) employed in the B of the KMK is lower than that used in the B of the MMK. Thus, for example, at the initial grip, the S in the former was 19.2 rpm, while in the latter 21-45 rpm were observed. In the Makeyevskiy B the S at the initial grip of analogous blooms was 0-65 rpm. In the "Azovstal" B 1170 the S at the initial grip is higher than in the case of the B of the KMK, and 75 rpm are attained by the rolls during the 2d pass and 60-75 rpm during the 11th - 14th passes. The S during ejection is also considerably higher: 24.0-55.6 rpm were observed in rolling of rail-blooms in the B of the KMK, while 29.8-95.5 rpm were recorded for the B 1170. It is shown that a further increase in rolling reduction is possible for both B's. Investigations also pointed out the desirability of increasing the diameters of the rolls of the B 1150 and B 1170 by approx. 100 mm, and the diameters of their journals by 60-70 mm, because on the driven end the journal is subjected to stresses which are close to the yield point. The action of the motor should be automated to produce automatic braking after the metal has left the rolls, to be followed by the reversal. Blooming mills-Rolling speeds-Determination

Card 2/2

ALEKSANDROV, A. A., Prof.; MEYEROVICH, I. M., ROKOTYAN, Ye. S., Candidates of Tech. Sci.;
SAKHAROV, A. I., Docent; STUKALOV, M. I., Engr.; YASHCHENKO, V. A., Engr.;
DOLMATOV, F. M., Engr.;

"Investigation of Power and Strength Characteristics of Blooming Mills to Obtain Maximum Output Capacity," Rolling Mills; Studies, Calculation, Design and Operation, No. 8, Moscow, Mashgiz, 1956. 258 p.

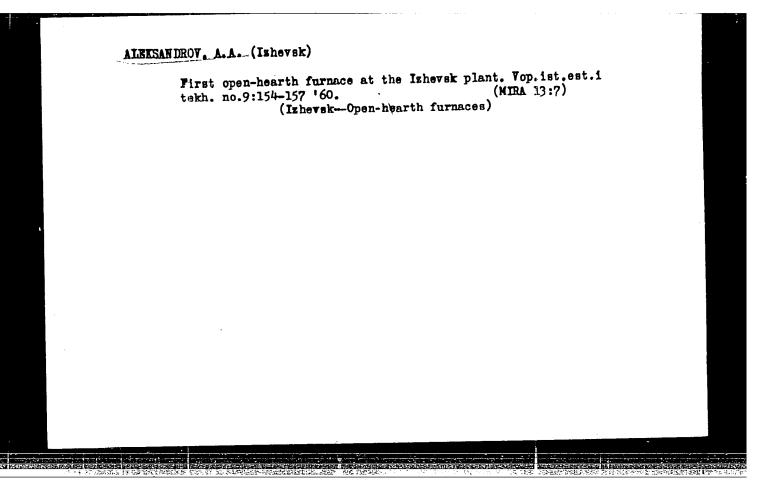
Articles by Rokotyan, Ye. S., Meyerovich, I. M., and others describe results of experiments condcuted on blooming, cold-rolling, duralumin-dressing, and car wheel rolling mills.

ALEKSANDROV, A.A.

ROEDTYAN, Ye.S., kandidat tekhnicheskikh nauk; MEYEROVICH, I.M., kandidat tekhnicheskikh nauk; ALEKSANDROV, A.A., professor; SAKHEROV, A.I., dotsent; STUKALOV, M.I., inzhener; TASHCHENKO, V.A., inzhener; DOLMATOV, F.M., inzhener; of blooming mills by determining potentialities in factors of strength and lower of the equipment.

[Trudy] TSNIITMASH no.83:134-147 '56, (MIRA 10:9)

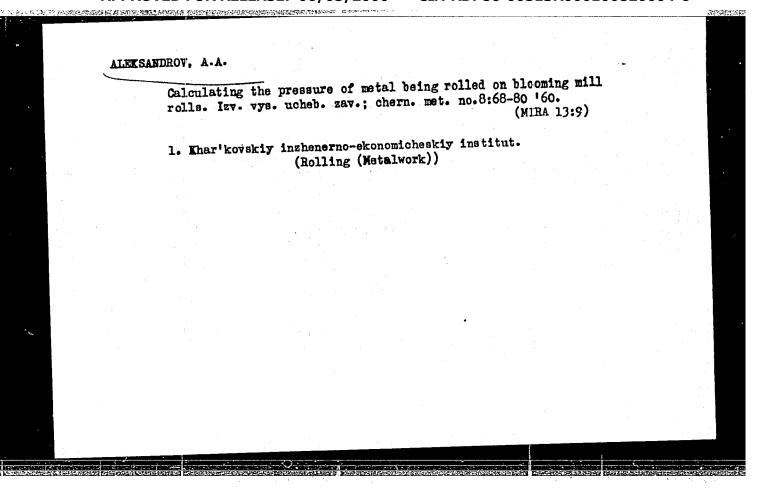
(Rolling mills) (Mechanics)



# ALEKSANDHOV, A.A., prof.

Ways of improving blooming and slabbing mills. Metallurg 5 no.9:29-32 S 160. (MIRA 13:8)

1. Khar'kovskiy inshenerno-ekonomicheskiy institut. (Rolling mills)



Blooming mills for new metallurgical plants. Izv. vys. ucheb. zav.; chern. met. 4 no.12:92-99 '61. (MIRA 15:1)	
1. Khar'kovskiy inzhenerno-ekonomieheskiy institut. (Rolling mills)	
$\epsilon$	

ALEKSANDROV, A.A.: GAVRILOV, V.Yu.; KISELEV, A.G.; LAZURKIN, Yu.S.;

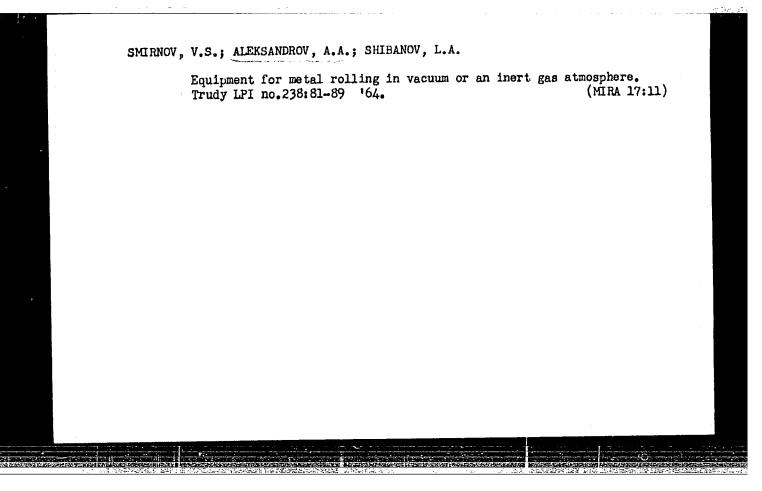
MOKUL'SKIY, M.A.

Origin of broad electron paramagnetic resonance lines in nucleic acids and their complexes with proteins. Dokl. AN SSSR 141 nc.6: 1483-1485 D '61. (MIRA 14:12)

1. Predstavleno akademikom A.F.Aleksandrovym. (Paramagnetic resonance and relaxation) (Nucleic acids) (Ferromagnetism)

MINENKO, V.A.; ALEKSANDROV, A.A.; SVETS, V.Ye.; BORZENKO, V.P.; KURILOV, P.G.; KHAZANOVICH, N.L.; Prinimali uchastiye: POPOV, A.I.; KONOVALOV, A.N.; TERTYCHNAYA, I.Yu.; POSHKREBNEV, V.P.; DMITRIYEVA, S.M.; KORNILOVA, A.V.

Work organization in the section, of metal feed to blooming mills. Met. i gornorud. prom. no.2:67-68 Mr-Ap '64. (MIRA 17:9)



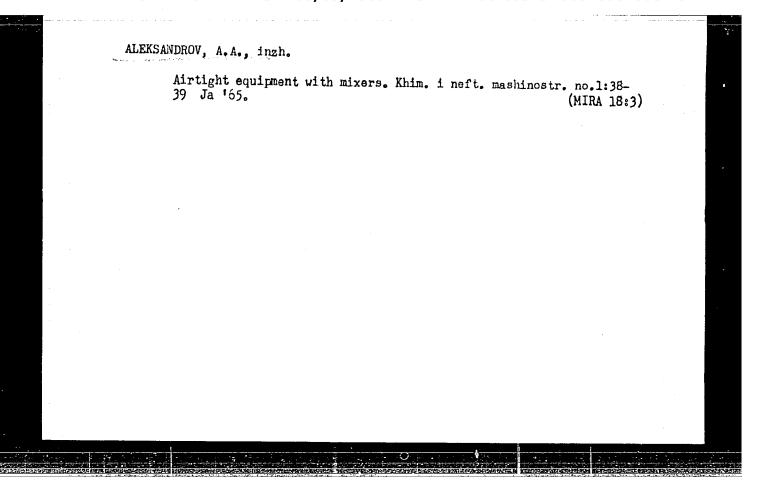
SMIRNOV, V.S.; TRON', A.S.; ALEKSANDROV, A.A.; VITORSKIY, Ya.M.; EYBAL-CHEMKO, N.D.

Effect of vacuum rolling on the structure and gas contant of titanium and molybdenum. Trudy IPI no.238:90-94 '64.

(MIRA 17:11)

SMIRNOV, V.S.; ALEKSANDROV, A.A.; TRON', A.S.

Using vacuum or an inert atmosphere during metalworking by pressure. Trudy LPI no.238:101-103 '64. (MIRA 17:11)



IJP(c) JD/HM/HM/JG EWT(m)/EWP(v)/EWP(t)/ETI/EWP(k) L. 08340-67 SOURCE CODE: UR/0137/66/000/007/D009/D010 ACC NR: AR6033105 AUTHOR: Smirnov, V. S.; Tron', A. S.; Aleksandrov, A. A.; Rybal'chenko, N. D. TITLE: Producing bimetals by hot rolling in vacuum / SOURCE: Ref. zh. Metallurgiya, Abs. 7D70 REF SOURCE: Tr. Leningr. politekhn. in-ta, no. 260, 1965, 22-27 TOPIC TAGS: bimetal, hot rolling, plastic deformation, bimetal welding ABSTRACT: The results are presented of an investigation of the effect of reduction values, the ratio of thicknesses in a packet, and the purity of treatment of Welding surfaces on the weld strength of Me during plastic deformation in vacuum. The results of metallographic examination of the transition zone are also given. The investigations were carried out on pairs of Me: steel 3—Cu, steel 3—Ti, steel 3—1Kh18N9T, Mo—Ni, and Mo—Cu. To ensure strong welds deformation of 5--10% is sufficient. With increased reduction of the packet, the weld strength grows. In changing the ratio of thickness of layers of individual Me in a bimetal packet, the weld strength decreases with increased thickness of the layer of more plastic Me. At the boundary of Me contact in a bimetal, obtained UDC: 621.771.014.2 Card 1/2

ACC NR: AR6033105			O diffusional	
by hot rolling in vacuu processes. The thick value of reduction of the surfaces, and on the sabstract]	ness of the zone acpe	of mechanical treat	ment of welded	1
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L 07463-67 EWI(d), ACC NRI AP6035652	/EWT(m)/EWP(c)/EWP(k)/EWP(v)/EWP(t)/EWP(1)/ETI IJP(c) JH/JD/I HW SOURCE CODE: UR/0133/66/000/011/1014/1015	
	. S.; Danilevskiy, O. F.; Aleksandrov, A. A.; Stol'nyy, V. I.;	49
ORG: none		<i>B</i>
TITLE: Manufacture	of clad plates by rolling evacuated packs	
SOURCE: Stal', no.	11, 1966, 1014-1015	
TOPIC TAGS: metal	cladding, clad plate, titanium	1
ABSTRACT: A method	of cladding of steel plates (45 x 1300 x 3500 mm) with titanium ide interlayer has been developed. Cladding was done by rolling	
a pack composed of	an St.3'steel slab, a VT-1 titanium cladding plate, and a	<b>.</b> .
pack were sealed by	erlayer. To prevent oxidation of the titanium, the edges of the welding and all the air was evacuated from the inside of the	
face of the claddin	eheated to 1050C, was rolled to the desired thickness. The sur- g plate was found to be smooth and even. Ultrasonic inspection	(7)
	lamination between the titanium and steel. Introduction of this try would help in production of clad plates of good quality and	-
eliminate the need	of vacuum rolling mills. Orig. art. has: 1 figure.	
bimetal \% SUB CODE: 13, 14/	SUBM DATE: none/ ORIG REF: 007/ ATD PRESS: 5104	
Card 1/1 gd	UDC: 621.771.8	
<i>J</i>	A STATE OF THE STA	

ACC NR: AT7003263 (N) SOURCE CODE: UR/2563/66/000/263/0042/0047.

AUTHOR: Aleksandrov, A. A.; Tron', A. S.; Rybal'chenko, N. D.

ORG: none

TITLE: Production of nickel-copper composite material by vacuum rolling

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 263, 1966. Mashiny i tekhnologiya obrabotki metallov davleniyem (Machinery and technology of metal working by pressure), 42-47

TOPIC TAGS: composite material, nickel copper composite material, composite material rolling, vacuum pack rolling, composite material bond strength, composite material rolling technology.

ABSTRACT: M-1 grade copper and 99.99%-pure nickel sheets, 10 mm thick, vacuum annealed at 700 and 900C, respectively, were slowly cooled, assembled into 20 x 40 x 100 mm packets, pack rolled in a vacuum of up to 1 · 10<sup>-5</sup> mm Hg at 750—1050C with a 5—52% reduction, and investigated to determine the effect of the rolling temperature, depth of vacuum, and degree of reduction on the bond strength and microstructure. The highest bond strength, 24—25.5 Kg/mm<sup>2</sup>, was observed in

Card 1/2

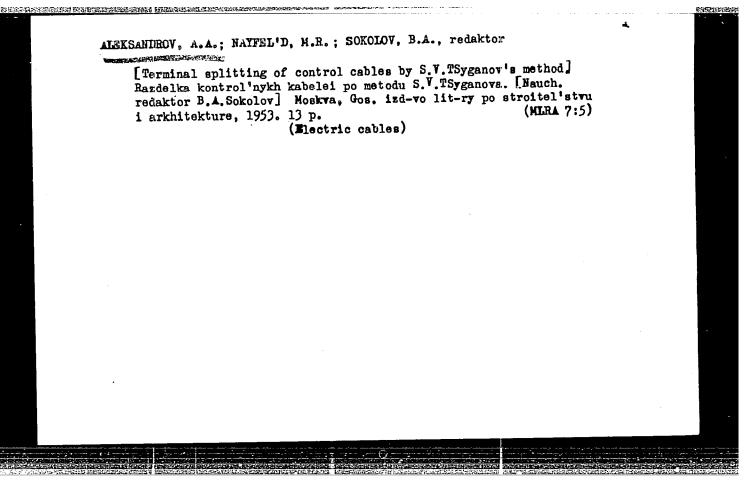
ACC NR: AT7003263

composite sheets rolled with a 30% reduction in a vacuum of 1  $\cdot$   $10^{-4}$ mm Hg at 1050-950C and a packed width-to-height ratio of 1:2. The surface finish of the joined sheets had no effect on the bond strength of the composite metal. The bond strength was also practically unaffected by annealing at 400-600C, but slightly decreased to 22-23  $Kg/mm^2$  with annealing at 800-1000C. The metal near the interface had a finer grain structure than the base metal. No transition zone was observed at the interface of composite specimens in the as-rolled condition, but the specimens annealed at 900C for 24 hr had a 25-40µ thick intermediate layer, probably of a solid solution of copper'in This indicated that the diffusion of copper into nickel was a predominant process in the rolling and annealing of composite metal. Further experiments showed that composite parts can be obtained by onepass hot rolling of composite blanks in vacuum followed by rolling the blanks into finished parts in the air. The copper-nickel and nickelcopper composite metal, pack rolled at 950C in a vacuum of 2 · 10-5 mm Hg with a 15-25% reduction per pass and subsequently rolled in the air at room temperature, had a bond strength of 22-24 Kg/mm<sup>2</sup>. The nickel-copper-nickel and nickel-copper foils, 0.2-0.4 mm thick, satisfied all requirements for metal composites used in the radioelectronic industry. Orig. art. has: 4 figures.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 011

Card 2/2

"Scientific and Technical Conference of Research Organization of the Main Electrical Assembly Plant of the Ministry of Construction of Feavy Industry Enterprises," Byul. stroi. tekh., 9, No.16, 1952

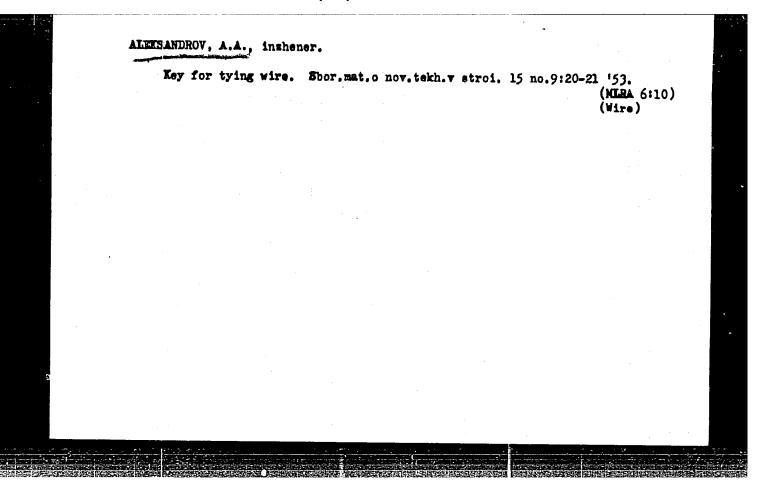


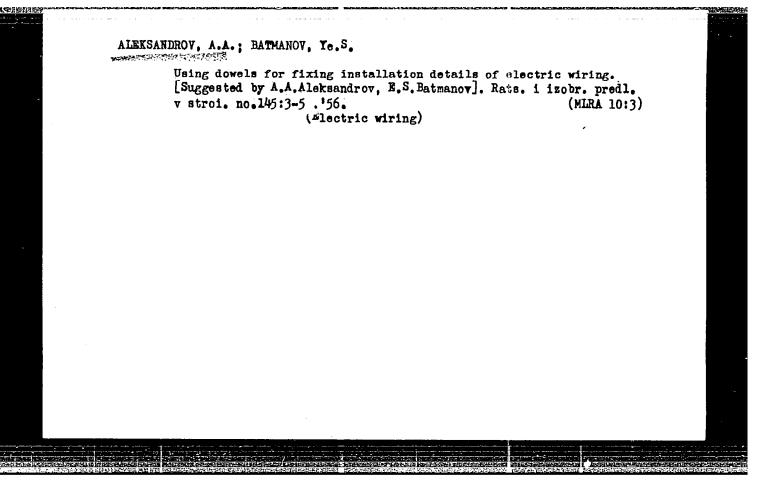
### ALEKSANDROV, A.A.

[Stakhanovite methods in preparation and installation of steel conduits in electric installation work] Stakhanovskie metody sagotovki i montasha stal'-nykh trub pri proizvodstve elektromontashnykh rabot. Moskva, Gos. izd-vo (MIRA 6:10) lit-ry po stroitel'stvu i arkhitekture, 1953. 21 p. (Electric conduits)

- 1. ALEKSANDROV, A. A. Eng.
- 2. USSR (600)
- 4. Electric Engineering
- 7. Post-operational rationalization of installation work. Shor. mat. o nov. tokh. v stroi. 15 No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.





Fixing t	Fixing installation details on gypsum plaster board. [Suggested by A.A.Aleksandrov]. Rats. i izobr. predl. v stroi. no.145:6-8 '56. (MIRA 10:3)						
	(Electric wiring) (Plaster board)						
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ALEXSANDROV, A.A.; SAVIN, M.A.; PEREL'MAN, Ya.V.

"Protestive grounding in electric installations" by
M.R. Maifel'd. Reviewed by A.A. Aleksandrov, M.A. Savin,
IA.V. Perel'man. Promenerg. 12 no.1:36-37 Ja '57. (MLRA 10:2)

1. Glavnyy energetik zavoda "Elektrosila" (for Aleksandrov)
2. Inspektor Energoinspektsii Energosbyta Leningradskoy
elektroenergeticheskoy sistemy (for Savin) 3. Chlen
Vsesoyutnogo nauchnogo inshenerno-tekhnicheskogo obshchestva
energetikov (IONTOEP) (for Perel'man),
(Electric currents-Grounding)

ALEKSON STOV, A.A.

AUTHORS: Aleksandrov, A.A. and Ustinov, A.P.

94-1-16/24

TITLE:

A Roller-type Current Rectifier (Rolikovyy vypryamitel'

toka)

PERIODICAL: Promyshlennaya Energetika, 1958, pp. 33 - 34 (USSR)

ABSTRACT: This brief article describes mechanical rectifiers developed by the German firm Kalor-Emag in which the contact system includes rollers. The equipment is suitable for production of medium-voltage d.c., and can be paralleled with mercury-arc rectifiers. The operating principle is described and illustrated with reference to Fig.1. There are two stationary sectionalised contact rings which are bridged as required by moving rollers. Equipment for 4 000 A d.c. has 6 pairs of contact segments. Equipment for 12 000 A is illustrated in Fig.2. The firm of Kalor-Emag manufactures two types of rectifier, one vertical, as illustrated in Fig.3, and the other a double horizontal arrangement, illustrated in Fig.4. The main characteristics of the equipment are tabulated. There are 4 figures.

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Library of Congress

Card 1/1

KERTSELLI, L.I.; RYZHKIN, V.Ya.; ALEKSANDROV, A.A.

Investigation of thermal efficiency of electric power plants equipped with high capacity turbine installations of high and superhigh steam parameters. Nauch.dokl.vys.shkoly; energ. no.3:109-120 158. (HIRA 12:1)

1. Rekomendovano kafedroy teplovykh elektricheskikh stantsiy Moskovskogo energeticheskogo instituta. (Electric power plants)

SOV/96-59-10-14/22

Vukalovich, M.P. (Dr. Tech. Sci.); Zubarev, V.N. (Cand. Tech. Sci.); Aleksandrov, A.A. (Engineer) and .AUTHORS:

Kalinin, Yu. Ya. (Engineer)

An Experimental Determination of the Specific Volumes of TITLE:

Water up to Pressures of 1200 kg/cm<sup>2</sup>

PERIODICAL: Teploenergetika, 1959, Nr 10, pp 74-77 (USSR)

ABSTRACT: Available information about the thermo-dynamic properties of water at high pressures is inadequate and experimental

data on the specific volume of water were required. The data are needed both to formulate tables of specific

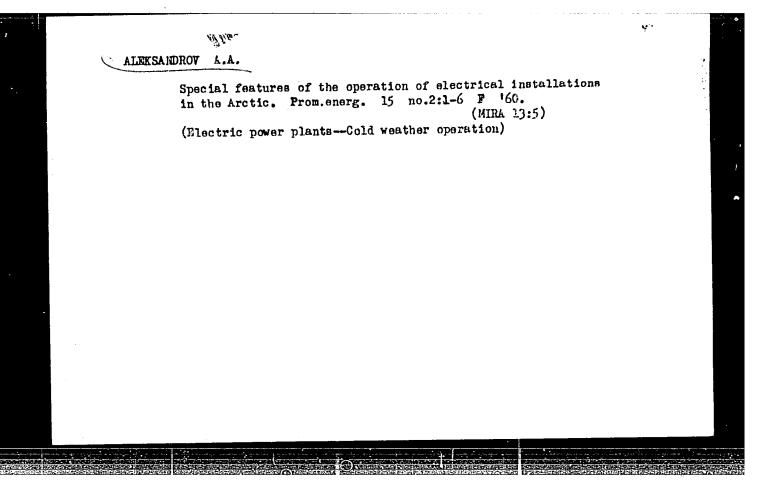
volume, and also to calculate calorific values of the specific heat at constant pressure and of the enthalpy of water at high pressures. Similar work is in hand in the U.S.A. by Kennedy, Knight and Holser. The equipment used was very similar to that described by Kirillin in

Teploenergetika Nr 11, 1935. The piezometer was made of steel 1Kh18N9T, whose thermal coefficient of expansion is

tabulated. Precautions taken to ensure accuracy of the experiments are described in considerable detail.

Specific volumes of water were determined at six Card 1/2 temperatures, and the experimental data are tabulated.

sov/96-59-10-14/22 An Experimental Determination of the Specific Volumes of Water up to Pressures of 1200 kg/cm<sup>2</sup> The maximum error of the test data calculated in the usual way is 0.06-0.08%, the latter figure relating to the maximum test temperature. The experimental data obtained in this work are compared with published American and Soviet data at each of the six temperatures. Agreement between the present work and published American work is good; such differences as there are lie within the total experimental error of the two sets of data. At low temperatures there is good agreement with the published Soviet data, but differences become appreciable at higher temperatures. This is evidently because values of specific volume at high pressure previously published were obtained by extrapolation of experimental data obtained at a pressure of 300 kg/cm2. The previously Card published Soviet data of Vukalovich appear to be in need 2/2 of correction. There are 2 tables, 1 figure and 8 refs, (5 Soviet, 3 English). ASSOCIATION: Moscow Power Institute (Moskovskiy energeticheskiy institut)



VUKAIOVICE, M.F., doktor tekhn.nauk; ZUHAREV, V.N., kand.tekhn.nauk;
KALININ, Yu.Ya., inzh.; AIEKSANDROV, A.A., inzh.

Equation of state of water based on experimental data.
Teploenergetika 8 no.4:76-81 Ap '61. (MIRA 14:8)

1. Moskovskiy energeticheskiy institut.
(Water—Thermal properties)
(Equation of state)

VUKALOVICHK M.P. dertor tekhn.nauk, prof.; ZUBAREV, V.N., kand.tekhn.nauk; AIEKSANDROV, A.A., inzh.

Experimental determining of the specific volumes of steam at temperatures from 7000 to 9000 C and under a pressure up to 1200 Kilogram per square centimeter. Teploenergetika 9 no.1:49-51 Ja 162. (MIRA 14:12)

1. Moskovskiy energeticheskiy institut. (Steam)

ZUBAREV, V. N., kand. tekhn. nauk; ALEKSANDROV, A. A., kand. tekhn. nauk

Heat transmission and viscosity of a 96-per cent (in volume) solution of ethyl alcohol in water. Teploenergetika 10 no.3: 74-78 Mr 163. (MIRA 16:4)

1. Moskovskiy energeticheskiy institut.

(Ethyl alcohol-Thermal properties)

·	Using waste waters to eliminate freezing of the dr Burenie no.9:18 '64.	rilling tool. (MIRA 18:5)
	1. Trest "Pervomayburneft".	
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 $E_{i}T(m)/EPF(n)-2/EWA(d)/EWP(t)/EWP(k)/EWP(b)/EWA(c) Pf-Li/Pu-Li$ 1 35023-65 IJP(c) JD/HW/JG S/2563/64/000/238/0081/0089 Hb+ ACCESSION NR: AT4047713 AUTHOR: Smirnov. V. S. (Professor, Corresponding member AN SISR); Aleksandrov. A. A. Shibanov, L. A. TITEE: Installation for the rolling of metals under vacuum or in inert atmosphere SOURCE: Leningrad. Politekhnicheskiy institut. Trudy\*, no. 238, 1964. Obrabotka metallov davleniyem (Metalworking by pressure), 81-89 TOPIC TAGS: vacuum deformation, inert atmosphere, molybdenum, titanium, diffusion pump system ABSTRACT: The authors discuss Soviet and foreign installations which make it possible to carry out hot plastic deformation under vacuum or in inert atmospheres. Fiziko-tekhnicheskiy institut AN USSR (Physico-Technical Institute, Academy of Sciences Ukr. SSR) built an experimental installation in 1953 but its productivity was very low. LPI im. M. I. Kalinin (Leningrad Polytechnic Institute im. M. I. Kalinin) improved the design by incorporating a system of diffusion pumping and using a pump before the vacuum chambers. A number of shortcomings Cord 1/2

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	ed but the experimental rolli		
	ossibility of utilizing the inst n and its effect on the structu		
tals. Orig. art. has: 8 fig		are and properties or me-	and the steel
ASSOCIATION: None			
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NR REF SOV: 005	OTHER: 002		
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IJP(c) JD/HW/JO ACCESSION NR: AT4047714	S/2563/64/000/238/0090/0094 ///
AUTHOR: Smirnov V. S. (Profes Aleksandrov, A. A.; Vitorskiy, Ya.	ssor, Corresponding member AN SSSE); Tron!, A. S.;
TITLE: The effect of vacuum rol	ling on the structure and gas impregnation of
titanium and molybdenum SOURCE: Leningrad, Politekhni	cheskiy institut. Trudy*, no. 238, 1964.
4	(Metalworking by pressure), 90-44
pregnation	num, vacuum deformation, structure, gas im-
tribution of gases during heating	under vacuum on structure, contents and dis- was observed in 20x35x120 mm Ti specimens
showed that Ti specimens absorb	st Mo specimens. <u>Metallographiclexamination</u> ed gases primarily during heating and not during
and coarse-grained. After vacuu	rolled Ti specimens was more homogeneous mannealing at 1200C and air rolling, the gas
impregnated layer in Ti specimen	ns greatly exceeded the thickness of the 0.03 to

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0.05 mm surface layer of I such layer. During subseq	uent rolling gas-impregi	nated surface layers are re	no adi-
ly ruptured and cracks pro	pagated. Orig. art. has	: 6 figures and 3 tables	
ASSOCIATION: None			
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ACCESSION NR: AT4047716 S/2563/64/000/238/0101/0103 </th <th></th>	
AUTHOR: Smirnov, V. S. (Professor, Corresponding member AN SSSR)  A. A.; Tron!, A. S.  TITLE: Using vacuum or inert media in metalworking by pressure	×
SOURCE: Leningrad. Politekhnicheskiy institut. Trudy*, no. 238, 1964. Obrabotka metallov davleniyem (Metalworking by pressure), 101-103	
TOPIC TAGS: pressure metalworking refractory metal, vacuum, hot deformation, molybdenum, titanium, niobium  ABSTRACT: In recent years, equipment has been developed for metalworking	
refractory and chemically active metals by pressure. The authors discuss foreign equipment and methods and point out the difficulties involved in operating the mechanisms and machinery nacessary for metalworking by pressure under vacuum or in an inert gas medium. 'They emphasize the adverse effect of active	
gases on the properties of Mc. Ti and Nb during heating and hot plastic deformation and contend that gases are absorbed by the surface layers of these metals,	
Card 1/2	

L 36309-65 ACCESSION NR: AT4047716 primarily, during the heating process. It is, therefore, suggested that the removal of the gas-saturated surface layer by method of pickling, electropolishing or mechanical working and by shortening the heating time, improves properties without the employment of vacuum treatment or inert gases during heating and hot deformation. However, the economic effectiveness of the recommendation remains to be verified on an industrial scale. Further study of the effect of vacuum treatment and of inert gases on structure and properties as well as the investigation of installation design and friction that occurs during hot deformation are recommended. ASSOCIATION: None ENCL: 00 S UB CODE: MM SUBMITTED: 00 OTHER: 008 NR REF SOV: 010

1\_31367-65 EP3/EPF(n)-2/EFT(n)/EWP(k)/EWP(b)/EWA(u)/EWP(t) Pf-4/ JD/HW/JG IJP(c) ACCESSION NR: AT4047715 \$/2563/64/000/238/0095/0100 50 AUTHOR: Smirnov, V. S. (Professor, Corresponding member AN SSSR); Amonenko, V. H.; Tron', A. S.; Aleksandrov, A. A. TITLE: Effect of rolling in a vacuum on metal properties SOURCE: Leningrad. Politekhnicheskiy institut. Trudy no. 238, 1964. Obratotka metallov davleniyem (Metalworking by pressure), 95-100 TOPIC TAGS: vacuum rolling, metal rolling, metal vacuum rolling, titanium, molybenum, niobium, chromium, tantalum, vanadium ABSTRACT: Highly purified refractory metals such as molybdenum, timgsten, miobium, chromium, tantalum, vanadium and their alloys are widely used in the development of new fields of engineering. All of these metals and alloys are generally prepared in a vacuum, since heat treatment of these metals in air leads to their contamination. Frequently, plating is used prior to rolling for protection of the metal. However, removal of the plating after rolling is very difficult. Heating and deformation of active metals in a vacuum has several advantages in comparison with treatment in an inert gas. The present paper briefly discusses the results of investigations into the effect of hot rolling in a vacuum on the mechanical Card

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ACCESSION NR: AT4047715

properties and structure of several metals. The metals were deformed on a 170 rolling mill in a vacuum, but the auxiliary mechanisms and bearings were not in a vacuum. The metal was heated to 1500-1700C at a rolling rate of 0.1-1.0 m/sec with cooling of billets up to 800 mm in length in a vacuum of 10-1 to 2x10-5 mm Hg or in a protective gas. The rolling mill and stand used for the tests is illustrated and described in detail. The tests indicated that the ultimate strength of titanium rolled in a vacuum is lowered by about 3-5% in comparison with titanium rolled in air. The relative elongation increased by 60-80%. Heating and rolling in a 2x10-5 mm Hg vacuum increases the plastic properties by 10-20% in comparison with rolling in a 10-3 mm Hg vacuum. Heating in a vacuum and rolling in air lead to an increase in the plastic properties of titanium by 15-20%. Nipbium heated and rolled in a vacuum has plastic properties 60-80% higher than those of metal rolled in air. The ultimate strength is lowered in this case by about 15-20%. Heating and rolling of molybdenum in a vacuum also leads to an increase in plastic properties by 60-90% and to a lowering in ultimate strength by 10%. The deformability of metals increases by 35-70% when heated and rolled in a vacuum. The plastic properties of the metals improve noticeably at residual pressures of 10-3 mm Hg. Changing of the vacuum from 10-3 to 2x10-5 mm Hg improves the plastic properties of the metals by an additional 15-20%. Hot rolling of metals in a vacuum not only protects them from contamination but also purifies them to some

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